

Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraph number [0068] , with the following rewritten paragraph:

[0068] A nozzle-variable type turbocharger 15 is attached to engine 1, and more specifically a compressor section 15a of turbocharger 15 is disposed upstream of collector 14. An intercooler 16 is disposed between compressor section ~~[[15]]~~ 15a and collector 14 to cool the intake air compressed by turbocharger ~~[[14]]~~ 15. An intake throttle valve ~~[[14]]~~ 17, through which intake air flow rate is controlled, is provided upstream of collector 14. A swirl control valve 18 for controlling gas flow in each cylinder is provided at each intake port for each cylinder. An electronic control unit (ECU) 61 outputs control signals to intake throttle valve 17 and swirl control valve 18, respectively.

Please replace paragraph number [0077] , with the following rewritten paragraph:

[0077] At step S101 ECU 61 reads coolant temperature T_w , exhaust gas flow rate Q_{exh} , an engine speed N_e , exhaust gas temperature T_{exh} . At step S102 ECU 61 determines whether or not coolant temperature T_w is higher than or equal to a predetermined temperature T_{w1} . When the determination at step ~~[[S1]]~~ S102 is negative, that is, coolant temperature T_w is lower than predetermined temperature T_{w1} , the routine proceeds to step S103 wherein ~~ECU 61~~ ECU 61 sets mode decision value ATS_{state} at 0 ($ATS_{state}=0$). Thereafter, the routine returns to a start block. When the determination at step ~~[[S1]]~~ S102 is affirmative, that is, coolant temperature T_w is higher than or equal to predetermined temperature T_{w1} , the routine proceeds to step S104 wherein ECU 61 sets mode decision value ATS_{state} at 1 ($ATS_{state}=1$).

Please replace paragraph number [0079], with the following rewritten paragraph:

[0079] At step S108 ~~ECU61~~ ECU 61 determines whether or not NOx trap quantity ΣNOX is greater than or equal to a predetermined quantity ΣNOX1 . When the determination at step S108 is affirmative ($\Sigma \text{NOX} \geq \Sigma \text{NOX1}$), the program proceeds to step S109 wherein ECU 61 sets mode decision value ATState at 2 (ATState=2). When the determination at step S108 is negative ($\Sigma \text{NOX} < \Sigma \text{NOX1}$), the program proceeds to step S110.

Please replace paragraph number [0123], with the following rewritten paragraph:

[0123] At step S531 ECU 61 reads engine speed Ne, target EGR rate Megr and target intake air quantity tQac. At step ~~S523~~ S532 ECU 61 retrieves a maximum working gas quantity Qgmax from a table shown in Fig. 26 with reference engine speed Ne. At step S533 ECU 61 calculates a target working gas quantity ratio tQh0 from the following expression (16) on the basis of target intake air quantity tQac.

$$tQh0 = tQac \times (1 + Megr) / VCE\# / Qgmax \quad \text{---(16)}$$

where VCE# is a stroke volume of piston.

Please replace paragraph number [0174], with the following rewritten paragraph:

[0174] At step ~~S1006~~ S1007, ECU 61 calculates a PID correction quantity MITfb (which includes a proportional term) from the following expression (37).

$$\text{MITfb} = K_{\text{Ptexh}} \times (\delta \text{texh} - I_{\text{texh}} + D_{\text{texh}}) + K_{\text{texh0\#}} \quad \text{---(37)}$$

where Ktexh0# is an initial value of the correction value. At step S1008, a final main injection timing MITf is obtained by adding MITfb to main injection timing MIT (MITf=MIT + MITfb).

Please replace paragraph number [0181], with the following rewritten paragraph:

[0181] Figs. 54A and 54B show relationships of the exhaust gas temperature and a particulate combustion speed relative to the air/fuel ratio. The particulate combustion speed is a decreased quantity per unit time of particulates deposited on diesel particulate filter 33. During the filter recovery processing, excess air ratio λ is set at a lean state so as to suitably suppress the combustion of particulates. The particulate combustion speed largely varies according to the change of the air/fuel ratio and has a characteristic that the particulate combustion speed largely increases as the air/fuel ratio is increased. On the other hand, when the air/fuel ratio is decreased to a value outside of the target range due to the change of the engine operating condition, there is a possibility that excessive heat load is applied to diesel particulate filter 33 and therefore a filter element 331 generates a crack A as shown in Fig. 55B or loses stoppers ~~333~~ 332 as shown by reference ~~[[A]]~~ B in Fig. 55C. If the increased quantity of the fuel injection quantity is further large, there is a possibility that discharged fuel cools diesel particulate filter 33 and prevents the recovery operation. However, according to the present invention, during the filter recovery mode, excess air ratio λ is maintained constant, and this prevents diesel particulate filter 33 from receiving excessive heat load and the recovery thereof from being prevented by such a cooling due to the excessive fuel increase.